

ABSTRACT

This invention involves a two-level variable chip rate spreading and despreading method used in CDMA systems. The total spreading gain is the product of the two level spreading factors. Orthogonal sequences, ZCZ sequences and Pseudo-Noise (PN) sequences can be employed as the first- and second-level spreading codes. By employing the two-level spreading method, the interference existing in the systems can be suppressed efficiently and the system performance can be improved significantly.